NAFTA and the Mexican Economy

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Summary

The North American Free Trade Agreement (NAFTA), in effect since January 1994, plays a very strong role in the bilateral economic relationship between Mexico and the United States. The two countries are also closely tied in areas not directly related to trade and investment such as security, environmental, migration, and health issues. The effects of NAFTA on Mexico and the Mexican economic situation have impacts on U.S. economic and political interests. A number of policymakers have raised the issue of revisiting NAFTA and renegotiating parts of the agreement. Some important factors in evaluating NAFTA include the effects of the agreement on Mexico and how these relate to U.S.-Mexico economic relations. In the 111th Congress, major issues of concern are related to U.S.-Mexico trade issues, economic conditions in Mexico, the effect of NAFTA on the United States and Mexico, and Mexican migrant workers in the United States.

In 1990, Mexico approached the United States with the idea of forming a free trade agreement (FTA). Mexico's main motivation in pursuing an FTA with the United States was to stabilize the Mexican economy and promote economic development by attracting foreign direct investment, increasing exports, and creating jobs. The Mexican economy had experienced many difficulties throughout most of the 1980s with a significant deepening of poverty. The expectation among supporters at the time was that NAFTA would improve investor confidence in Mexico, increase export diversification, create higher-skilled jobs, increase wage rates, and reduce poverty. It was expected that, over time, NAFTA would narrow the income differentials between Mexico and the United States and Canada.

The effects of NAFTA on the Mexican economy are difficult to isolate from other factors that affect the economy, such as economic cycles in the United States (Mexico's largest trading partner) and currency fluctuations. In addition, Mexico's unilateral trade liberalization measures of the 1980s and the currency crisis of 1995 both affected economic growth, per capita gross domestic product (GDP), and real wages. While NAFTA may have brought economic and social benefits to the Mexican economy as a whole, the benefits have not been evenly distributed throughout the country. The agricultural sector experienced a higher amount of worker displacement after NAFTA, in part because of increased competition from the United States but also because of Mexican domestic agricultural reforms. In terms of regional effects, initial conditions in Mexico appear to have determined which Mexican states experienced stronger economic growth as a result of NAFTA. Some economists argue that while trade liberalization may narrow income disparities over the long run with other countries, it may indirectly lead to larger disparities in income levels within a country.

Over the last decade, the economic relationship between the United States and Mexico has strengthened significantly and the two countries continue to cooperate on issues of mutual concern. President Barack Obama met with Mexican President Calderón in May 2010 during the Mexican president's official state visit to the United States. The two leaders reaffirmed their commitment to increasing cooperation in a wide range of issues, including enhancing mutual economic growth. A key component for their global competitiveness initiative is to create a border the for the Twenty-First Century that will expand and modernize border facilities for a secure and more efficient border.

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Introduction

The North American Free Trade Agreement (NAFTA), in effect since January 1994, plays a key role in the bilateral economic relationship between Mexico and the United States. The two countries are closely tied in bilateral trade and investment, and in areas of mutual interest such as migration, security, environmental, and health issues. NAFTA's effect on Mexico and the state of the Mexican economy have implications for the overall relationship between the United States and Mexico and for U.S. economic and political interests. On May 19, 2010, Mexican President Felipe Calderón met with President Barack Obama during an official state visit of the Mexican president to the United States. The two leaders discussed a wide range of bilateral, hemispheric, and global issues that affect the two countries and reaffirmed their shared values regarding the safety, social and economic well-being, and security of citizens in both countries.[1] The two presidents expressed a commitment to increase cooperation in enhancing economic competitiveness and noted progress in the building of a Twenty-First Century border, which includes three new border crossings that are opening in 2010, initiation of three additional binational bridge projects, and significant modernization projects at existing border facilities.[2]

The 111th Congress will likely maintain an active interest in Mexico on issues related to counternarcotics, economic conditions, migration, trade, and border issues. Comprehensive immigration reform was debated early in the 110th Congress and immigration reform efforts could be considered once again in the 111th Congress. This report provides an overview of Mexico's motivations for entering NAFTA, the Mexican economy, the economic effects and views of NAFTA in Mexico, and possible policy options for Members of Congress. It also provides information on NAFTA's effect on Mexico's agricultural sector, one of the more controversial issues regarding the effects of NAFTA in Mexico. This report will be updated as events warrant.

Mexico's Motivations for Entering NAFTA[3]

In 1990, the President of Mexico at the time, Carlos Salinas de Gortari, approached then U.S. President George H.W. Bush with the idea of forming a free trade agreement (FTA). President Salinas de Gortari's motivations in pursuing an FTA with the United States were to increase economic growth by attracting foreign direct investment (FDI); boosting exports; creating industrial jobs; and giving the Mexican economy a growth stimulus. The Mexican economy had experienced many difficulties throughout most of the 1980s with a significant deepening of poverty. Mexico's intention in entering NAFTA was to increase export diversification by attracting FDI, which would help create jobs, increase wage rates, and reduce poverty. At the time NAFTA went into effect, many studies predicted that the agreement would cause an overall positive impact on the Mexican economy.

From the 1930s through part of the 1980s, Mexico maintained a strong protectionist trade policy in an effort to be independent of any foreign power and as a means to industrialization. Mexico

[1] The White House, Office of the Press Secretary, "Joint Statement from President Barack Obama and President Felipe Calderón," May 19, 2010.

[2] *International Trade Daily,* "Obama, Mexico's Calderón Discuss Obstacles to Resolving Truck Dispute," May 20, 2010.

[3] This section draws upon information from the following sources: CRS Report 93-668 E, *Mexico's Changing Policy Toward Foreign investment: NAFTA Implications;* United Nations, Economic Development Unit, *Mexico: Economic Growth, Exports, and Industrial Performance after NAFTA,* by Juan Carlos Moreno-Brid, Juan Carlos Rivas Valdivia, and Jesús Santamaria, December 2005.

established a policy of import substitution in the 1930s, consisting of a broad, general protection of the entire industrial sector. Mexico placed high restrictions on foreign investment and controlled the exchange rate to encourage domestic industrial growth. Mexico also nationalized the oil industry during this time. These protectionist economic policies remained in effect until the country began to experience a series of economic challenges caused by a number of factors.

The 1980s in Mexico were marked by inflation[4] and a declining standard of living. The 1982 debt crisis in which the Mexican government was unable to meet its foreign debt obligations was a primary cause of the economic challenges the country faced in the early to mid-1980's. Much of the government's efforts in addressing the challenges were placed on privatizing state industries and moving toward trade liberalization. In the late 1980s and early into the 1990s, the Mexican government implemented a series of measures to restructure the economy that included steps toward unilateral trade liberalization.

Mexican began to reverse its protectionist stance in the mid-1980s when the government was forced to declare that it was unable to repay its debts and to default on its loans. Then President Miguel de la Madrid took steps to open and liberalize the Mexican economy and initiated procedures to replace import substitution policies with policies aimed at attracting foreign investment, lowering trade barriers and making the country competitive in non-oil exports. In 1986, Mexico acceded to the General Agreement on Tariffs and Trade (GATT), assuring further trade liberalization measures and closer ties with the United States.

In November 1987, the United States and Mexico entered into a bilateral understanding on trade and investment called the *Framework of Principles and Procedures for Consultation Regarding Trade and Investment Relations.*[5] Prior to this agreement, there had been no legal framework to govern commercial relations between the two countries. There were two parts to the agreement, one served as a mechanism to address trade issues, and the other established an agenda for the removal or reduction of trade barriers. Seven topics were listed in the agenda for possible future discussions: textiles, agriculture, steel, investment, technology transfer and intellectual property, electronics, and information on the service sector. Under this framework understanding, two sectoral agreements were reached which liberalized trade in steel, textiles, and alcoholic beverages. In addition, working groups started meeting on agriculture, industry, services, tariffs, and intellectual property rights.

In October 1989, the two countries entered into a second trade and investment understanding called *The Understanding Regarding Trade and Investment Facilitation Talks*.[6] This agreement built on the work of the 1987 agreement, establishing a negotiating process for expanding trade and investment opportunities. These two agreements significantly improved trade relations between Mexico and the United States and other improvements in trade relations followed. Marking the advances in trade relations between the two countries, Mexico proposed negotiations for a free trade agreement with the United States. In June 1990, then President Carlos Salinas de Gortari of Mexico and then President George H.W. Bush issued a joint statement in support of negotiating a free trade agreement.

[4] High inflation causes interest rates and prices to go up and real wages to fall, thus decreasing consumption and investments due to the uncertainty in the market flow which contributes to a decline in the overall standard of living.

[5] Gary Hufbauer and Jeffrey Schott, *North American Free Trade: Issues and Recommendations,* Institute for International Economics, 1992.

[6] Ibid.

Economic Conditions in Mexico Before and After NAFTA

The Mexican economy is strongly tied to economic conditions in the United States, making it very sensitive to economic developments in the United States.[7] Mexico is highly reliant on exports and most of Mexico's exports go to the United States. In 2008, Mexico's exports as a percent of GDP equaled 31%, up from 10% twenty years ago, and over 80% of Mexico's exports went to the United States. The state of the Mexican economy is important to the United States because of the close trade and investment ties between the two countries, and because of other social and political issues that could be affected by economic conditions, particularly poverty and how it relates to migration issues.

Not all changes in economic growth or trade and investment patterns in Mexico since 1994 can be attributed to NAFTA. The economy has also been affected by other factors such as Mexico's previous market-opening measures in Mexico, financial crises, exchange rates, oil prices, and business cycles. Trade-related job gains and losses since NAFTA probably accelerated trends that were ongoing prior to NAFTA and are not totally attributable to the trade agreement. Isolating the economic effects of NAFTA from other economic or political factors is difficult. Mexico has experienced at least two major events outside of NAFTA that had significant economic consequences. Unilateral trade liberalization measures prior to NAFTA and the currency crisis of 1995 both affected economic growth, per capita GDP, and real wages in Mexico.

In the mid-1990s, Mexico experienced a financial crisis caused by a number of complex financial, economic, and political factors. The early 1990s in Mexico were marked by a large increase in foreign investment as investor confidence in the Mexican economy grew due to the prospect of NAFTA. However, signs that Mexico's economy was not as fundamentally strong as it appeared began to surface after the assassination of Mexican presidential candidate Luis Donaldo Colosio in March 1994.[8] The shock of the assassination resulted in a subsequent outflow of foreign exchange reserves and growing concerns about a currency devaluation. In response to these concerns, the Mexican government issued short-term dollar-indexed notes to finance the growing current account deficit.[9]

The Mexican government expected investor confidence to be restored after the August 1994 presidential election. Foreign investment flows, however, did not recover to the level of expectation. In the months following the election, the current account deficit widened as imports surged due to an overvalued peso. The government began to experience a short-term liquidity crisis.[10] By December 1994, the continued decrease in the inflows of foreign direct investment and foreign exchange reserves put pressure on the government to abandon its previous fixed exchange rate policy and adopt a floating exchange rate regime. As a result, Mexico's currency plunged by around 50% within six months, sending the country into a deep recession.[11]

[7] For more information, see CRS Report RL32934, *U.S.-Mexico Economic Relations: Trends, Issues, and Implications*, by M. Angeles Villarreal.

[8] U.S. General Accounting Office, *Mexico's Financial Crisis: Origins, Awareness, Assistance, and Initial Efforts to Recover,* GAO Report GGD-96-56, February 1996, p. 9.

[9] Ibid., p. 10.

[10] GAO Report GGD-96-56, pp. 5-6.

[11] Economist Intelligence Unit (EIU), "Mexico Finance: The Peso Crisis, Ten Years On," January 3, 2005.

In the aftermath of the 1994 devaluation, the Mexican government took several steps to restructure the economy and lessen the impact of the currency crisis among the more disadvantaged sectors of the economy. The United States and the International Monetary Fund (IMF) assisted the Mexican government by putting together an emergency financial support package of up to $50 billion. Mexico adopted tight monetary and fiscal policies to reduce inflation and absorb some of the costs of the banking sector crisis. The austerity plan also included an increase in the value-added tax, budget cuts, and increases in electricity and gasoline prices.[12]

The peso steadily depreciated through the end of the 1990s, which led to greater exports and helped the country's exporting industries. However, the peso devaluation also resulted in a decline in real income, hurting mostly the poorest segments of the population, but also the newly emerging middle class. Yet, NAFTA and the change in the Mexican economy to an export-based economy may have helped to soften the impact of the currency devaluation.

GDP Growth

Between 1960 and 1980, the Mexican economy grew at an average annual rate of over 6.5%, resulting in significant improvements in per capita GDP and living standards during that time period. In the years that followed, however, average real GDP growth dropped due to the 1982 debt crisis, which resulted in productivity growth falling to negative numbers. The government's economic reforms in the latter part of the 1980s helped stimulate economic growth and GDP growth averaged 3.8% between 1990 and 1994 (see **Figure 1**).[13] After the 1995 financial crisis, GDP growth declined by 6.2%, and then increased in the following three years by 5%-6% annually. Real GDP growth dropped from 6.2% in 2000 to -0.2% in 2001. After 2001, economic conditions in the United States improved, which helped economic growth in the Mexican economy. Real GDP growth in 2004 was 4.0%, up from 0.8% in 2003 and 2002. In 2006, GDP grew by 4.9% but decreased to 3.3% in 2007.[14] Real GDP grew by only 1.5% in 2008. The 2009 global financial crisis had a strong adverse effect on the Mexican economy, and the GDP growth rate contracted by 6.6%. Estimates for 2010 show a possible growth rate of 4.2%.[15]

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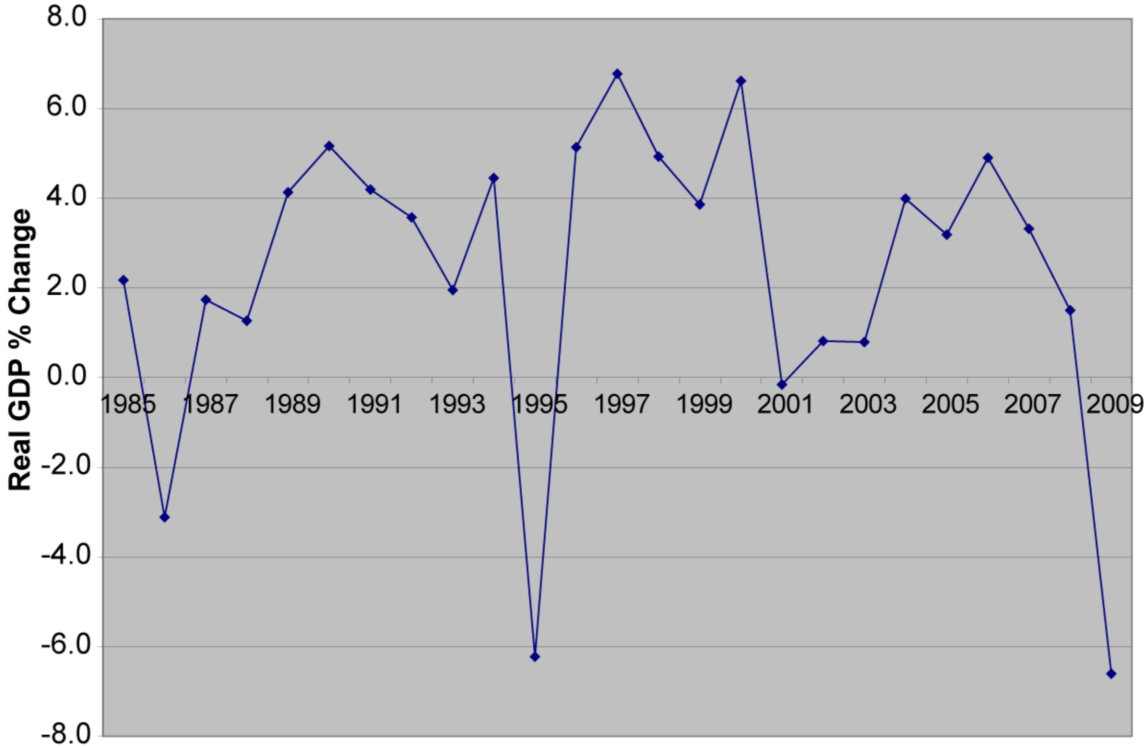
[12] Joachim Zietz, "Why Did the Peso Collapse? Implications for American Trade," *Global Commerce*, by , Volume 1, No. 1, Summer 1995.

[13] International Monetary Fund (IMF) Working Paper, *GDP Growth, Potential Output, and Output Gaps in Mexico*, by Ebrima Faal, May 2005.

[14] EIU, *Country Reports: Mexico*, various years.

[15] Based on country data from the EIU online database.

Figure 1. Real GDP Growth in Mexico



Source: Economist Intelligence Unit.

Poverty

Poverty is one of the more serious and pressing economic problems facing Mexico. Addressing poverty issues and creating jobs have been a priority for the Calderon Administration. Former President Fox also considered poverty as one of Mexico's principal challenges and made it a top priority during his administration. The Mexican government had made progress in its poverty reduction efforts, but poverty continues to be a basic challenge for the country's development.[16] Poverty is often associated with social exclusion, especially of indigenous groups of people who comprise 20% of those who live in extreme poverty. The 1995 currency crisis was a major setback to Mexico's efforts in alleviating poverty levels, and though there was some improvement after the crisis, the poverty levels did not decline to their pre-crisis levels until 2002 (see **Figure 2**).[17]

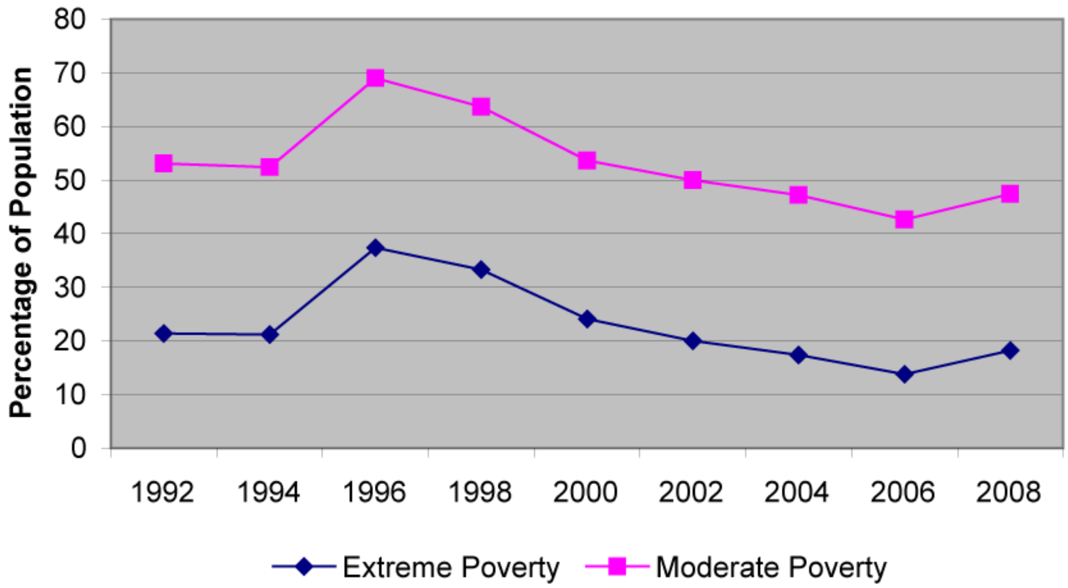
The percentage of people living in extreme poverty, fell from 24% of the population in 2000, to 17% in 2004, and 14% in 2006 as shown in **Figure 2**. In 2008, however, the extreme poverty rate went up again to 18%. Those living in moderate poverty fell from 54% of the population in 2000 to 50% in 2002 and 43% in 2006, though the percentage of those living in moderate poverty also increased in 2008 to 47%. Mexico's continuing problem of poverty is especially widespread in

[16] The World Bank Group, *Mexico Makes Progress and Faces Challenges in Poverty Reduction Efforts*, June 2004.

[17] The World Bank Group, *Poverty in Mexico - Fact Sheet*, 2008. Woodrow Wilson International Center for Scholars, *More than Neighbors: An Overview of Mexico and U.S.-Mexico Relations*, by Andrew Selee, undated.

rural areas and remains at the Latin American average.[18] The government has made significant efforts to combat poverty, but it remains widespread and is closely linked to high levels of inequality in terms of unequal access to healthcare, education, and available work opportunities.[19] In rural areas the percentage of those living in moderate poverty 61% in 2008, while that of those living in extreme poverty was 32%. The rates for urban areas were 40% and 11%, respectively.[20]

Figure 2. Poverty Levels in Mexico: 1992-2004



Source: Mexico's *Consejo Nacional de Evaluación de la Política de Desarrollo Social*, July 2008.

Notes: Percentages of those living in moderate poverty include those living in extreme poverty. The Mexican government defines *extreme poverty* as those living on less than $1.50 a day in rural areas and less $2.00 a day in urban areas. Moderate poverty is defined as living on less than $2.70 a day in rural areas and $4.00 a day in urban areas.

Mexico's main program to reduce poverty is the *Oportunidades* program. The program seeks to not only alleviate the immediate effects of poverty through cash and in-kind transfers, but also by improving nutrition and health standards among poor families and increasing educational attainment. This program provides cash transfers to families in poverty who demonstrate that they regularly attend medical appointments and can certify that children are attending school. Monthly benefits are a minimum of $15 with a cap of about $150. The majority of households receiving *Oportunidades* benefits are in Mexico's six poorest states: Chiapas, Mexico State, Puebla, Veracruz, Oaxaca, and Guerrero.[21] *Oportunidades* covers five million households, almost a quarter of all Mexican families.[22]

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[18] Ibid.

[19] The World Bank, *Poverty in Mexico: An Assessment of Conditions, Trends and Government Strategy,* Report No. 28612-ME, June 2004.

[20] *Consejo Nacional de Evaluación de la Política de Desarrollo Social* (CONEVAL), Poverty Report. July 18, 2009.

[21] Santiago Levy, *Progress Against Poverty,* Brookings Institution, 2006.

[22] Woodrow Wilson International Center for Scholars, *The United States and Mexico: More than Neighbors,* by Andrew Selee, Christopher Wilson, and Katie Putnam, May 2010.

Effects of NAFTA on Mexico

NAFTA is a free trade agreement that eliminated trade and investment barriers among NAFTA trading partners. Upon implementation, almost 70% of U.S. imports from Mexico and 50% of U.S. exports to Mexico received duty-free treatment. The remainder of duties were eliminated over a period of 15 years after the agreement was in effect. The agreement also contained provisions for market access to U.S. firms in most services sectors; protection of U.S. foreign direct investment in Mexico; and intellectual property rights protection for U.S. companies. At the time that NAFTA went into effect, a number of economic studies predicted that the trade agreement would have a positive overall effect on the Mexican economy, narrowing the U.S.-Mexico gap in prices of goods and services and the differential in real wages.

Economic Effects

A number of studies have found that NAFTA has brought economic and social benefits to the Mexican economy as a whole, but the benefits have not been evenly distributed throughout the country. Most studies after NAFTA have found that the effects on the Mexican economy tended to be modest at most.[23] While there have been periods of positive growth and negative growth after the agreement was implemented, much of the increases in trade began in the late 1980s when the country began trade liberalization measures. Though its net economic effects may have been positive, NAFTA itself has not been enough to lower income disparities within Mexico, or between Mexico and the United States or Canada.

A 2005 World Bank study assessing some of the economic impacts from NAFTA on Mexico concluded that NAFTA helped Mexico get closer to the levels of development in the United States and Canada. The study states that NAFTA helped Mexican manufacturers to adopt to U.S. technological innovations more quickly and likely had positive impacts on the number and quality of jobs. Another finding was that since NAFTA went into effect, the overall macroeconomic volatility, or wide variations in the GDP growth rate, has declined in Mexico. Business cycles in Mexico, the United States, and Canada have had higher levels of synchronicity since NAFTA, and NAFTA has reinforced the high sensitivity of Mexican economic sectors to economic developments in the United States.[24]

Several economists have noted that it is likely that NAFTA contributed to Mexico's economic recovery directly and indirectly after the 1995 currency crisis. Mexico responded to the crisis by implementing a strong economic adjustment program but also by fully adhering to its NAFTA obligations to liberalize trade with the United States and Canada. NAFTA may have supported the resolve of the Mexican government to continue with the course of market-based economic reforms, resulting in increasing investor confidence in Mexico. The World Bank study estimates that FDI in Mexico would have been approximately 40% lower without NAFTA.[25]

One of the main arguments in favor of NAFTA at the time it was being proposed by policymakers was that the agreement would improve economic conditions in Mexico and narrow the income gap between Mexico and the United States. Studies that have addressed the issue of economic

[23] For more information, see CRS Report RS21737, *NAFTA at Ten: Lessons from Recent Studies*, by J. F. Hornbeck.

[24] The World Bank, *Lessons from NAFTA for Latin America and the Caribbean*, by Daniel Lederman, William F. Maloney, and Luis Servén, 2005. (Hereinafter *Lessons from NAFTA*, 2005).

[25] Ibid.

convergence[26] have noted that economic convergence in North America might not materialize under free trade as long as "fundamental differences" in initial conditions persist over time. Most studies have found that there are a number of domestic factors that explain the lack of convergence and that a free trade agreement alone is not sufficient to narrow the disparities in economic conditions between the two countries. In general, most studies suggest that for Mexico to narrow these income disparities, the government needs to invest more in education; innovation and infrastructure, as well as improve the quality of national institutions. This is not a unique situation to Mexico since other countries in Latin America are experiencing similar issues. According to one study, income convergence between a Latin American country and the United States is limited by the wide differences in the quality of domestic institutions, in the innovation dynamics of domestic firms, and in the skills of the labor force.[27] Another study notes that the ability of Mexico to improve economic conditions depends on its capacity to improve its national institutions, adding that Mexican institutions did not improve significantly more than those of other Latin American countries during the post-NAFTA period.[28]

A number of domestic factors could explain why Mexico is not converging to U.S. levels in terms of per capita income, income per worker, or average wages. A recent study concluded that the U.S.-Mexico income gap has not narrowed due to a number of reasons, some of which are related to poorly implemented economic reforms and a lack of important reforms that are needed in other areas.[29] First, Mexico has done poorly in implementing the economic reforms of the late 1980s and early 1990s, which has actually reduced economic growth instead of the having the intended goal of promoting growth. The study states that the government did not have the proper institutional and regulatory framework to properly implement privatization and trade liberalization efforts, which exacerbated the effects of the 1995 economic crisis and only resulted in private monopolies taking over public ones. Second, Mexico failed to take into consideration implementation of other important economic reforms. Since the mid-1990s, according to the study, the government has failed to make other much needed reforms such as fiscal policy or labor law reform, partially because of the political sensitivity of these issues but also because of the special interest groups that have been successful in blocking these reforms.[30] Third, the authors conclude that Mexico is lacking a "domestic engine" to spur internal demand, which is increasing the country's vulnerability to economic conditions in the United States.[31] Finally, according to the study, the government's restrictions on macroeconomic policies limit the ability of Mexican policymakers to respond to external shocks in a countercyclical manner.[32]

Mexican Wages and Per Capita GDP

Any changes in Mexican wages since NAFTA implementation cannot be solely attributable to trade integration. Wages are reflective of a number of economic variables including GDP,

[26] Economic convergence can be broadly defined as a narrowing of the disparities in the economic levels and the manufacturing performances of particular countries or their regions. The goal of the theory of economic convergence is to research and analyze the factors influencing the rates of economic growth and real per capita income in countries.

[27] *Lessons from NAFTA*, 2005.

[28] *Economia*, "NAFTA and Convergence in North America: High Expectations, Big Events, Little Time," by William Easterly, Norbert Fiess, and Daniel Lederman, Fall 2003.

[29] Working Paper by the Center for U.S.-Mexican Studies (USMEX), the Mexico Institute of the Woodrow Wilson Center, El Colegio de la Frontera Norte, and el Colegio de México, *NAFTA, Trade, and Development*, by Robert A. Blecker and Gerardo Esquivel, October 2009.

[30] Ibid, pp. 14-16.

[31] Ibid, p. 17.

[32] Ibid.

productivity, exchange rates, and international trade. Mexican wages have generally followed the cycles of the Mexican economy for many years. Wages increased from the early 1980s until the mid-1990s, when the currency crisis hit when real wages fell by 15.5% (see **Table 1**). Wages increased after 1996 until 2000 when the percent increase was 10.8% and then stagnated for several years. Wages fell by 3.2% in 2008 and by 5.0% in 2009.

Table 1. Mexican Wages and Per Capita GDP: 1996-2009

	1996	1998	2000	2002	2004	2006	2008	2009[a]
Average Real Wage Index[b] (LCU, 2005=100)	79	81	90	97	99	102	102	96
Average Real Wages[c] (% change from previous year)	-15.5	2.6	10.8	1.9	-0.1	2.3	-3.2	-5.0
Per Capita GDP ($ US)	3,814	4,681	6,293	6,850	7,239	8,865	9,913	7,870
Per Capita GDP[d] ($ PPPs)[e]	8,459	9,447	10,561	10,803	11,660	13,560	15,480	14,920

Source: Economist Intelligence Unit.

a. Estimates

b. Average real wage index in local currency rebased to 2005=100.

c. Percentage change in hourly wages in local currency adjusted for inflation over previous year.

d. Per Capita GDP in $PPPs are estimates.

e. PPP refers to purchasing power parity, which reflects the purchasing power of foreign currencies in U.S. dollars.

Mexico's trade liberalization measures may have affected the ratio between skilled and non-skilled workers in Mexico. In 1988, the real average wage of skilled workers in Mexico's manufacturing industry was 2.25 times larger than that of non-skilled workers. This ratio increased until 1996, when it was about 2.9, but then remained stable until 2000.[33] The World Bank study found that NAFTA brought economic and social benefits to the Mexican economy, but that the agreement in itself was not sufficient to ensure a narrowing of the wage gap between Mexico and the United States. The study states that NAFTA had a positive effect on wages and employment in some Mexican states, but that the wage differential within the country increased as a result of trade liberalization.[34]

According to a report published in the *Journal of Development Economics* that examines wage inequality in Mexico before and after NAFTA, studies on NAFTA have not always agreed on the effect of trade on wages or the reasons for the increasing wage differential between skilled and unskilled Mexican workers.[35] Some studies conclude that the reason for the rise in wages for more highly skilled workers is the technological change brought about by trade. Others link the rise in wage differentials to trade and the changes in prices of skill-intensive goods that result from trade liberalization. As prices for skill-intensive goods decline after trade liberalization, the demand for skilled workers rises and wages rise. The authors of the report conclude that the sharp

[33] Esquivel, Gerardo, and José Antonio Rodríguez-López, "Technology, trade, and wage inequality in Mexico before and after NAFTA," *Journal of Development Economics*, 2003.

[34] *Lessons from NAFTA*, 2005.

[35] Esquivel and Rodríguez-López, p. 553.

increase in wage inequality in Mexico was caused by technological change. They argue that trade liberalization alone had almost no effect on the wage gap, but that the technological change that came about after NAFTA caused the wage gap to widen.[36]

U.S.-Mexico Trade

Mexico's trade with the United States has grown considerably since 1994. Mexico had a trade deficit of $1.3 billion with the United States in 1994, the year of NAFTA implementation (see **Table 2**). In subsequent years, the trade balance shifted to a surplus as exports to the United States increased. While imports from the United States also increased after NAFTA, the rate of growth was not as high. In 2008, Mexico had a trade surplus of $84.8 billion with the United States. U.S. imports from Mexico totaled $216.3 billion in 2008 while exports to Mexico totaled $131.5 billion. In 2009, however, U.S.-Mexico trade declined due to the economic slowdown resulting from the global financial crisis. U.S. imports from Mexico decreased 19% and U.S. exports to Mexico decreased 20% in 2009. The top 2009 U.S. imports from Mexico were oil and gas; motor vehicles; audio and video equipment; and communications equipment. The exports to Mexico were motor vehicle parts; petroleum and coal products; basic chemicals, resin and related products; and oilseeds and grains.[37]

Much of the increase in U.S.-Mexico trade since 1994 could be attributable to NAFTA, but, as stated previously, exchange rates and economic conditions have also been a factor. The devaluation of the Mexican peso against the U.S. dollar in 1995 limited the purchasing power of the Mexican people and also made products from Mexico less expensive for the U.S. market. U.S. imports from Mexico increased from $49.5 billion in 1994 to $74.2 billion in 1996, while U.S. exports to Mexico also increased but at a slower rate. As economic conditions in Mexico improved in the late 1990s, trade with the United States rose steadily until 2001 when the downturn in the U.S. economy caused trade to slow down. In the years after 2001, Mexico's economy continued to follow U.S. economic trends and trade increased in the following years, though at a slower rate.

Table 2. U.S.-Mexico Trade: 1994-2009

(US $ billions)

	1994	1996	1998	2000	2002	2004	2006	2008	2009
U.S. Exports	50.8	54.7	75.4	100.4	86.1	93.0	114.6	131.5	105.7
U.S. Imports	49.5	74.2	93.0	134.7	134.1	155.0	197.1	216.3	176.3
Trade Balance	1.3	-19.5	-17.6	-34.3	-48.0	-62.0	-82.5	-84.8	70.6

Source: Compiled by CRS using trade date from the United States International Trade Commission.

Regional Effects of NAFTA

While the overall effects of NAFTA on the Mexican economy might have been positive, the effects have been unequal across regions and sectors. Wages and employment tend to be higher in states experiencing higher levels of foreign direct investment and trade. The effects of trade

[36] Ibid., pp. 551-552.

[37] Based on trade data from the United States International Trade Commission Interactive Tariff and Trade DataWeb at heep://dataweb.usitc.gov..

liberalization have varied widely among regions, and while trade liberalization may narrow income disparities over the long run with other countries, it may indirectly lead to larger disparities in income levels within a country.

Studies have found that initial conditions in Mexico determined which Mexican states experienced stronger economic growth as a result of NAFTA.[38] States with less developed infrastructure (transportation and communications) did not receive the benefits from NAFTA as other states. Telecommunications infrastructure and human capital were especially important in determining the economic performance of individuals states. The states with more telephone service and a higher skilled labor force experienced more positive impacts. Northern and central states grew faster throughout the 1990s, modestly reducing the income differentials with those of the Mexico City area. Poorer southern states grew slower during the same time period due to low levels of education, infrastructure, and quality of local institutions, making them less prepared to gain from trade liberalization.[39]

Mexico's Agricultural Sector and NAFTA

One of the more controversial aspects of NAFTA has been its effect on the agricultural sector in Mexico and the perception that NAFTA has caused a higher amount of worker displacement in the agricultural sector than in other sectors of the economy. While some of the changes in the agricultural sector are a direct result of NAFTA, as Mexico faced increasing import competition from the United States, many of the changes are also attributable to Mexico's unilateral agricultural reform measures. Mexico began to reform its agricultural sector in the 1980s; most domestic agricultural and trade policy reform measures included privatization and resulted in increased competition. Mexico's unilateral reform measures included eliminating state enterprises related to agriculture and removing staple price supports and subsidies.[40] With the reform of Mexico's Agrarian Law, lands that had been distributed to *ejidos* or community rural groups following the 1910 revolution gained the right to privatize. Another major reform was the abolishment of *CONASUPO*, Mexico's primary agency for government intervention in agriculture. The agency bought staples from farmers at guaranteed prices and processed the products or sold them at low prices to processors and consumers. By 1999, the company was abolished.[41] Many of Mexico's domestic reforms in agriculture coincided with NAFTA negotiations, beginning in 1991, and continued beyond the implementation of NAFTA in 1994. The unilateral reforms in the agricultural sector make it difficult to separate those effects from the effects of NAFTA.

[38] William Easterly, Norbert Fiess, and Daniel Lederman, *Economia,* "NAFTA and Convergence in North America: High Expectations, Big Events, Little Time," Fall 2003. The World Bank, *Lessons from NAFTA for Latin America and the Caribbean,* by Daniel Lederman, William F. Maloney, and Luis Servén, 2005. Gerardo Esquivel and Miguel Messmacher, *Economic Integration and Sub-National Development: The Mexican Experience with NAFTA,* February 2003.

[39] Easterly, Fiess, and Lederman, "NAFTA and Convergence in North America: High Expectations, Big Events, Little Time," Fall 2003.

[40] Mexico's agricultural reform measures of the 1990s removed government subsidies and price controls in the agricultural sector that resulted in rising prices for tortillas. Tortillas are the basic staple for the Mexican diet and a necessity of the poor. For this reason, higher prices had a greater effect on the poor than on middle- and higher-income Mexicans.

[41] Yuñez Naude, Antonio, and J. Edward Taylor, *The Effects of NAFTA and Domestic Reforms in the Agriculture of Mexico: Predictions and Facts, Région et Développement No. 23-2006,* 2006, p. 163. (Hereinafter Yuñez Naude and Taylor)

Mexican Productivity, Exports and Prices

With Mexico's entry into NAFTA, the expectation was that relative prices for certain Mexican crops would decrease while prices for other crops would likely remain the same. This was based on the economic expectation that, by removing Mexico's price and trade interventions in basic crops such as grains and oilseeds, prices for the same goods in Mexico and the United States would equalize. Prices for crops that were exported such as fruits and vegetables were expected to stay the same because these had not been subject to major government intervention before or since NAFTA. NAFTA and Mexico's internal reforms were expected to lead to the "law of one price" for all agricultural goods produced in North America. This meant that prices for basic crops such as grains and oilseeds produced in Mexico, which previously had fixed prices by the government, would decline as these goods faced competition from U.S. goods. NAFTA and agriculture reform measures were also expected to increase efficiency in Mexico's agricultural production as farmers adjusted to competition from lower cost imports. Production in agricultural sectors that had prior price and trade interventions was expected to decrease as lower-priced imports from the United States entered the market, while production in export-oriented sectors, mainly fruits and vegetables, was expected to increase. As a result of these shifts, employment was expected to increase in some areas, but, according to one study, the increase was not expected to be large enough to absorb all the workers who would be displaced by reduced production in other sectors.[42]

After NAFTA, Mexican prices of basic crops such as maize dropped and, subsequently, Mexican imports of those crops increased. Mexican agricultural production, however, did not decrease after NAFTA. The Mexican government's unilateral liberalization of corn and NAFTA were both factors in declining prices of corn in Mexico. In 1993, the price of corn in Mexico was $4.84 per bushel; the price fell to $3.65 per bushel in 1997 and has remained at about the same level ever since.[43] Mexican corn production, however, increased despite the decline in prices (see **Figure 3**). Total production of maize increased from an annual average of 12.5 million metric tons during the 1983-1990 period to an annual average of 17.7 million metric tons, representing an increase of 41%, during the post-NAFTA period of 1994-2001.[44] Mexican corn production yields were a fraction of U.S. corn production yields in 2003, but in spite of the low yields, Mexican corn production increased after NAFTA. Between 1990 and 2003, Mexican corn production increased 44%, a faster rate of growth than U.S. corn production which increased by 27% during the same time period.[45]

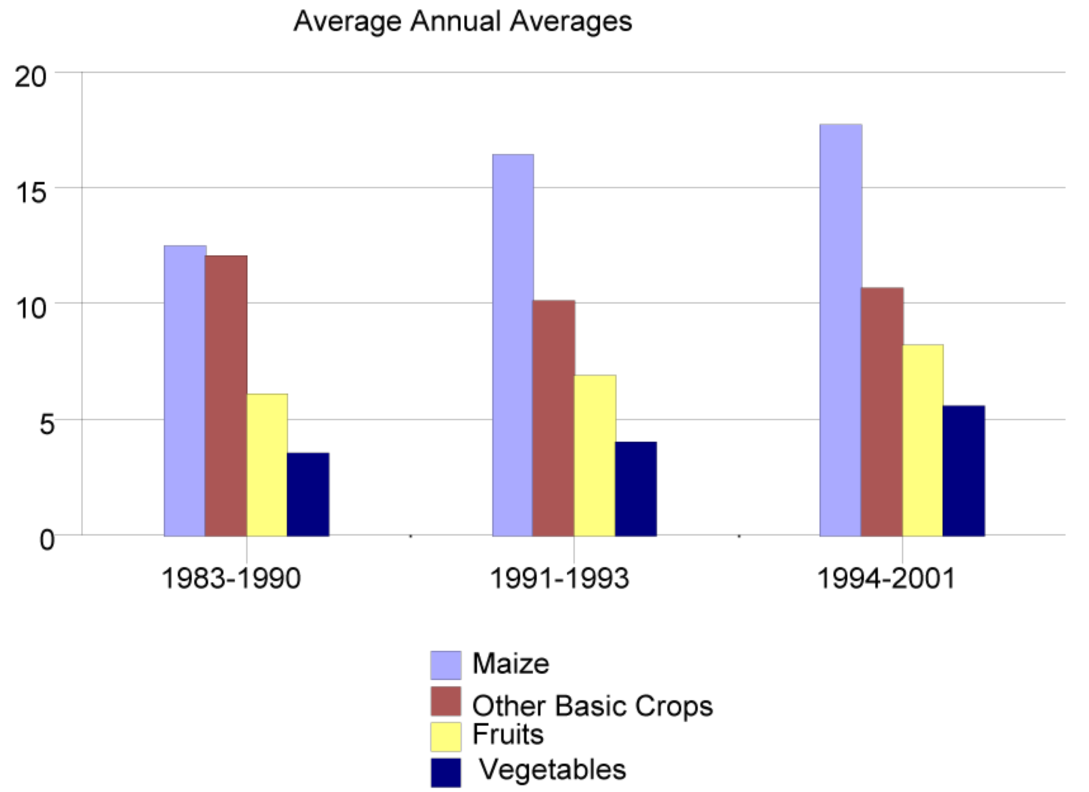
[42] Yuñez Naude and Taylor, p. 165.

[43] Hufbauer, Gary Clyde, and Jeffrey J. Schott, *NAFTA Revisited: Achievements and Challenges*, pp. 333-334. (Hereinafter Hufbauer and Schott).

[44] Yuñez and Naude, p. 179.

[45] Hufbauer and Schott, p. 331-332.

Figure 3. Mexican Agricultural Production



Source: Yunez Naude and Taylor, 2006.

Most of the effects from NAFTA likely took place within the first ten years of implementation. From 1993 to 2003, Mexican exports to the United States in agricultural products increased from $2.7 billion in 1993 to $6.3 billion in 2003, while Mexican exports to Canada increased from $136 million to $409 million over the same time period. Mexican imports from the United States also increased during this time period, from $3.6 billion in 1993 to $7.9 billion in 2003. Mexican exports to the United States sharply increased in the following categories: sugar and related products (595%), beverages excluding fruit juices (584%), and grains and feeds (328%). U.S. foreign direct investment in the Mexican food processing industry more than doubled from $2.3 billion in 1993 to $5.7 billion in 2000.[46]

Employment

Changes in agricultural employment in Mexico since NAFTA implementation cannot be attributed entirely to trade liberalization, not only because of Mexico's unilateral reform measures which coincided with NAFTA, but also because these changes may result from the industrialization process. Some economists argue that as countries become more industrialized, agriculture plays a smaller role in the economy and employs a smaller share of the workforce. One study covering 76 countries shows that a 1% increase in per capita GDP is associated with a reduction in agriculture value-added as a share of GDP by about 0.6 percentage points. In South

[46] Hufbauer and Schott, p. 288.

Korea, for example, the agricultural share of GDP declined from about 25% in 1970 to 5% in 2000 due to rapid industrialization.[47]

A report by the Institute for International Economics (IIE) on the achievements and challenges of NAFTA discusses the effect of NAFTA on the agricultural sector. The report uses international comparisons that suggest that the Mexican agricultural labor force as a proportion of total labor was very high at the time of NAFTA and that many farmers were likely to lose their jobs as the country became more efficient in agricultural production. The study cites an estimate that, once all Mexican tariffs were eliminated, total farm employment in Mexico would decline by an estimated 800,000 workers.[48] Agricultural production in Mexico has been increasingly centered on large-scale farms, factory-type livestock lots, and capital-intensive food processing, which puts pressure on small-scale farms and household farmers in Mexico. Another study states that the number of Mexicans employed in rural agriculture declined from 8.1 million to 6.8 million and that the value added[49] by Mexican agriculture dropped from about $32 billion in 1993 to about $25 billion in 2003.[50]

Rural-Urban Migration

Several studies found that the composition of Mexico's agricultural supply did not change significantly after NAFTA, although there were shifts in production as the agricultural sector adjusted to trade liberalization. One study found that some commercial farmers shifted production from staple crops to crops for export purposes and that yields of basic crops increased after NAFTA, but only for those crops grown under irrigated conditions.[51] The study states that Mexico's productivity of irrigated lands increased after NAFTA, but non-export, non-irrigated agriculture did not increase. The study also cited a disparity in agricultural productivity between the northern and southern states due to the poor transportation and irrigation networks in the central and southern states of Mexico, making transportation costs very expensive. Another reason is access to credit. Those with small farms in the rural areas have difficulties finding access to credit. Without government guarantees, Mexican commercial banks often hesitate to provide loans because of the historically high default rate on agricultural loans. To help address this problem, the Mexican government created *Financiera Rural* in 2002, which helps provide access to microcredits for farmers to buy machinery, equipment, and technology.[52]

The effect of NAFTA on rural-urban migration within Mexico or on migration from Mexico to the United States is difficult to quantify because of the various factors affecting migration. Mexican migration after NAFTA was affected by a combination of higher efficiency in Mexican agricultural productivity, sectoral adjustments to trade as some sectors experienced higher growth than others, urban growth in Mexico, and demands for unskilled labor in the United States. A study by the Carnegie Endowment for International Peace discusses the experience of Mexico since the enactment of NAFTA. The study's analysis focuses on people, the communities they live in, and the choices they make in response to their social and economic environment. The

[47] Ibid, p. 286.

[48] Hufbauer and Schott cite the study by Antonio Yuñez-Naude in the World Bank, *Lessons from NAFTA: The Case of Mexico's Agricultural Sector,* Washington, DC, 2002.

[49] Value added refers to the additional value created at a particular stage of production. The number is often used by economists to avoid double-counting the units of production in the final value of the product.

[50] Hufbauer and Schott, p. 289.

[51] Yuñez and Naude, p. 166.

[52] See http://www.financierarural.gob.mx.

study states that NAFTA accelerated the transition of Mexico to a liberalized economy but did not create the necessary conditions for the public and private sectors to respond to the economic, social, and environmental effects of increased trade with its NAFTA partners. One of the study's conclusion is that NAFTA's agricultural policies did not benefit subsistence farmers, while providing larger commercial farmers with substantial support.[53]

On the issue of Mexico's demographic patterns, one study found that NAFTA has had a minor role in Mexico's rural-urban migration. The study argues that the observed trend of migration from rural areas of Mexico to urban centers is directly the result of agricultural liberalization. However, the study also notes that these migration patterns have been in place since 1960.[54] Therefore, it is not clear how much of a role NAFTA has had in Mexico's rural-urban migration. While some observers believe that the trend of migration from rural areas of Mexico to urban centers is directly a result of NAFTA, many economists argue that rural-urban migration trends are common in the industrialization process of most countries. For this reason, some argue that the high concentration of poverty in rural areas makes it very important for Mexican policymakers to understand the nature of Mexico's farming structure when proposing development policies.[55]

Mexican Programs for Farmers

Anticipating the possible effects of NAFTA on farmers, the Mexican government established the Program of Direct Support for the Countryside, *Programa de Apoyos Directos Para el Campo (*PROCAMPO), in 1993. PROCAMPO provided income support to farmers over a 15-year transitional period through hectare-based direct payments to producers. However, budget austerity caused by Mexico's 1995 peso crisis resulted in budget cuts for the program. Another Mexican program, *Alianza para el Campo,* or Alianza, was created in 1995 to improve agricultural productivity with modern equipment and technology. A third program, *Produce Capitaliza*, provides infrastructure and extension-type assistance and support to livestock producers for upgrading pastures. While these three programs have provided support for Mexican farmers, there continues to be a huge disparity in subsidy levels between the United States and Mexico.[56] Some analysts have suggested that if the United States continued to subsidize corn production in the United States, Mexico should be permitted to impose some form of safeguard measures to protect farmers.[57]

Views of NAFTA in Mexico

Views of NAFTA within Mexico are mixed. Media reports tend to highlight the anti-NAFTA sentiment in the Mexican agricultural sector, but according to an extensive non-partisan opinion survey conducted by two independent groups in Mexico, the majority of the Mexican population views NAFTA favorably. A public opinion survey conducted in 2006 showed that the majority of the Mexican population favors trade liberalization with the United States and Canada. The survey, conducted by the *Centro de Investigación y Docencia Económicas* (CIDE) and the *Consejo*

[53] Audley, John J., Demetrios G. Papademetriou, Sandra Polaski, Scott Vaughan, Carnegie Endowment for International Peace, *NAFTA's Promise and Reality: Lessons from Mexico for the Hemisphere*, 2004.

[54] Ibid.

[55] Yuñez and Naude, p. 176.

[56] Hufbauer and Schott, pp. 295-296.

[57] Ibid, pp. 343-344.

Mexicano de Asuntos Internacionales (Mexican Council on Foreign Relations, COMEXI)[58], also showed that Mexicans have a very positive view of globalization, though there is some division on whether NAFTA should be renegotiated and whether Mexico should continue forming new trade agreements with other countries.[59]

The survey examined the views of the general public and another group of individuals, labeled as "leaders" in the study, which comprises 259 representatives from five sectors (government, politics, business, media and academic, and non-government organizations) with an interest in international affairs or professional ties with other countries. Both groups ranked export promotion among Mexico's two most important foreign-policy objectives and hold a largely favorable opinion of international trade. The poll showed that both the general public and the "leaders" considered international trade to be beneficial for the country's economy, job creation, Mexican businesses, poverty reduction, and their own living conditions. Ninety-six percent of the "leaders" and 79% of the general public favored increasing international trade (see **Figure 4**).[60]

The most vocal opponents of NAFTA in Mexico have criticized the agreement because of its negative effect on Mexico's agricultural sector. Labor and farmers' coalitions joined forces in early 2008 to protest the final tariff eliminations under NAFTA on corn. Tens of thousands marched on the streets of Mexico City in February 2008 to protest the agreement. Many of these were farmers or peasants with farm plots of less than 12 acres and criticized the Mexican government for not doing enough to help them adjust to increased competition from the United States. They stated that most of the government aid to help farmers has gone to large agricultural businesses in northern states. Groups representing the small farmers argue that, in the long run, small farmers in Mexico will not be able to compete with the "Americans' heavily subsidized and mechanized farms."[61]

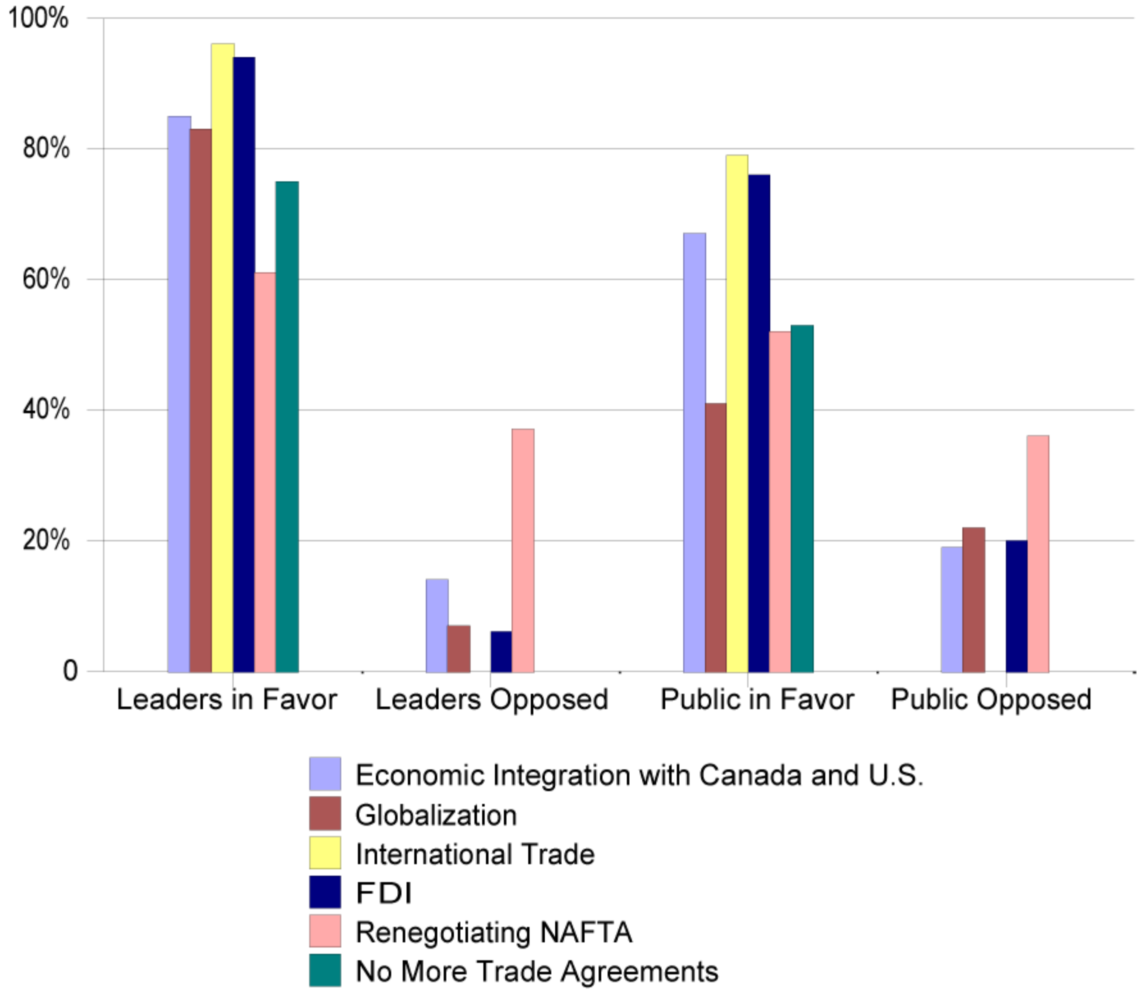
[58] The *Centro de Investigación y Docencia Económicas* (CIDE) is an academic non-government organization dedicated to research and education in Mexico. The *Consejo Mexicano de Asuntos Internacionales* (Mexican Council on Foreign Relations, COMEXI) is an independent, non-government organization in Mexico financed by membership dues and corporate support; members have a broad spectrum of professional experience from all over the world.

[59] *Mexico and the World 2006 - Leaders, public opinion and foreign policy in Mexico, the United States, and Asia: A Comparative Study,* CIDE and COMEXI, 2006.

[60] Ibid, pp. 20-21.

[61] *International Herald Tribune,* "Mexican Farmers Protest End of Corn-Import Taxes," by James C. McKinley Jr., February 1, 2008.

Figure 4. Mexican Public Opinion of Trade Liberalization



Source: Mexico and the World 2006 - Leaders, public opinion and foreign policy in Mexico, the United States, and Asia: A Comparative Study, CIDE and COMEXI, 2006.

Policy Issues

Mexico's economic relationship with the United States is of mutual importance to both Mexico and the United States. Economic studies on the effects on Mexico and Mexican views of NAFTA could provide a valuable perspective when evaluating the possibility of reopening parts of the agreement or alternative policy options. Some observers have suggested that one of the lessons from NAFTA for developing countries is that they negotiate trade agreements in a way that would be more beneficial to them. This could take place by including provisions such as financial assistance from trading partners or new minimum wage requirements.[62] Possible areas of consideration for U.S. and Mexican policymakers may include furthering economic integration between Mexico and the United States; enhancing or strengthening institutions created under NAFTA side agreements; or taking other measures to help resolve the issues related to income disparity between Mexico and the United States.

[62] Audley, John J., Demetrios G. Papademetriou, Sandra Polaski, Scott Vaughan, Carnegie Endowment for International Peace, *NAFTA's Promise and Reality: Lessons from Mexico for the Hemisphere*, 2004.

Some proponents of economic integration in North America have maintained that the emergence of China and India in the global marketplace may be putting North America at a competitive disadvantage with other countries and that NAFTA should go beyond a free trade agreement. Some observers have proposed that the U.S. government consider the possibility of forming a customs union or common market.[63] However, critics of this level of economic integration believe that NAFTA has already gone too far and that it has harmed the U.S. and Mexican economies and undermined democratic control of domestic policy-making.[64] If the United States were to potentially consider the further economic integration in North America, it would require cooperation by the governments of Mexico and Canada, and approval by the U.S. Congress. Expanding NAFTA to a customs union or common market is not likely to happen within the foreseeable future.

A possible option to address Mexico's income disparities with the United States is to consider expanding the mandate of the North American Development Bank (NADBank). NADBank and its sister institution, the Border Environment Cooperation Commission (BECC), were created under a bilateral side agreement to NAFTA called the Border Environmental Cooperation Agreement. The objective of NADBank and BECC is to help U.S.-Mexico border communities plan and finance environmental infrastructure projects. Some Members of Congress and elected officials from Mexico have informally discussed the possibility of expanding the mission of the NADBank to go beyond environmental and border issues. One possibility would be to expand NADBank projects to include transportation and other types of infrastructure projects. Another option would be to expand eligible projects to the entire region of Mexico instead of just the border area. Some policymakers have suggested the possibility of creating an infrastructure fund that would be managed by NADBank to provide investment in infrastructure, communications, or education.

U.S. policymakers may also consider increased cooperation with Mexico in its efforts to address the continuing problem of poverty and the difficulties being faced by farmers in the southern Mexican states. The Mexican government has taken a number of measures to lessen the impact of NAFTA on farmers and to address on-going poverty issues but the results of these programs has been mixed. Although the programs are not NAFTA-related, they do benefit segments of the population and regions of Mexico that have benefitted little from trade liberalization.

Another policy option that has been mentioned is withdrawal from NAFTA. Legislation was introduced in the 111th Congress for the United States to withdraw from NAFTA (H.R. 4759). The bill would require the president to give written notice to Mexico and Canada of the U.S. withdrawal, which would occur six months after the bill's enactment. The bill had 27 co-sponsors and was referred to the House Ways and Means Committee. Supporters of the bill believe that NAFTA did not live up to its promises and that it has resulted in large job losses in the United States and Mexico. Opponents of the bill believe that NAFTA has had 'incredible' successes in all three countries of North America and that withdrawing from NAFTA would cause job losses in the United States to increase and that U.S. exports to Mexico would be sharply impacted. They point to the losses in exports that have occurred already from Mexico's retaliatory tariffs due to

[63] U.S. Council of the Mexico-U.S. Business Committee, Council of the Americas, *A Compact for North American Competitiveness,* April 2005; Grubel, Herbert G., The Fraser Institute, *The Case for the Amero: The Economics and Politics of a North American Monetary Union,* September 1999.

[64] Public Citizen, Global Trade Watch, *North American Free Trade Agreement*, see http://www.citizen.org.

the trucking dispute and those exports represent only a small percentage of total U.S. exports to Mexico.[65]

[65] *International Trade Reporter*, "Legislation for Withdrawal from NAFTA Introduced in House with Bipartisan Support," March 11, 2010.

Appendix. Map of Mexico

Figure A-1. Map of Mexico

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